

CLAIMS

1. An apparatus for extracting power from a fluid flow, the apparatus comprising:
5 a fluid driveable engine,
a conduit, disposed to enable fluid communication between a portion of the fluid flow, the fluid driveable engine and a transmission fluid, the fluid in the fluid flow and the transmission fluid being different fluids the transmission fluid being a gas and the fluid flow being a liquid and the portion of the fluid flow being at a lower
10 pressure than the transmission fluid by virtue of its flow rate, thus causing the transmission fluid to be drawn through the conduit exiting the conduit via a plurality of entrainment outlets to become entrained in the fluid flow, the fluid driveable engine being arranged such that the flow of the transmission fluid along the conduit acts to drive the fluid driveable engine, and the size of each of the plurality of entrainment
15 outlets being that of a practical bubble size.
2. Apparatus as claimed in claim 1, comprising:
at least one fluid directing formation formed to define a channel in the fluid flow having a flow accelerating constriction shaped such that the fluid in the channel is
20 caused to accelerate as it flows through the flow accelerating constriction of the channel.
3. Apparatus according to claim 1, in which the fluid flow comprises a flow along a conduit between two positions in a fluid stream, a conduit inlet position being at a
25 higher fluid pressure than a conduit outlet position by virtue of a lower pressure velocity at the conduit outlet position.
4. Apparatus according to claim 3, comprising a fluid directing formation for constricting the fluid stream at the conduit outlet position with respect to the fluid
30 stream at the conduit inlet position.

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5. Apparatus as claimed in any one of the preceding claims, wherein the fluid flow comprises a flow of water.

6. Apparatus as claimed in any one of the preceding claims, wherein the
5 transmission fluid comprises air.

7. Apparatus according to any one of the preceding claims, in which the fluid driveable engine comprises a turbine.

10 8. Apparatus according to claim 7, comprising a heat exchanger in the transmission fluid flow path at a transmission fluid exhaust of the turbine.

9. Apparatus according to claim 8, in which the heat exchanger is arranged to cool the transmission fluid.

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10. Apparatus according to claim 8, in which the heat exchanger is arranged to cool a further transmission fluid in communication with external plant.

11. Apparatus according to claim 8, in which the heat exchanger is arranged to
20 condense water vapour from ambient air.

12. Apparatus according to any preceding claim, wherein the conduit is linked to a manifold from which a plurality of smaller conduits pass, each of said smaller conduits comprising an entrainment outlet.

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13. Apparatus according to any one of claims 1 to 11, wherein said plurality of entrainment outlets are formed within a porous material.

14. Apparatus according to any preceding claim, the conduit comprising fluid
30 directing formation, the fluid direction formations being arranged so as to cause downward flowing fluid to spin about a longitudinal axis.

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15. Apparatus for extracting power from a fluid flow, the apparatus being substantially as hereinbefore described with reference to the accompanying drawings.

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